Docket No. 217 - Development and Management Plan Inspection

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

Date: December 30, 2005

Inspector: Don Ukers

Location: <u>Transition Stations: Hoyts Hill, Archers Lane, Norwalk Junction</u>

Storm/

Rain Event: Approximately 1.16" of precipitation fell mostly in the form of rain/freezing rain

rain on 12/25-12/26 with another 0.63" on 12/29 as reported by NOAA.

Areas of Inspection	Observation	Recommended Action
Access Roads and Adjacent Roadways	- Hoyts Hill: Access is gained off Hoyts Hill Road. Ruts and erosion remain upgradient of the stone placed at the access point. 12/01-12/30/05 This disturbed area receives runoff from Hoyts Hill Road which has caused sediment to accumulate within the stone of the access drive. 12/30/05.	- Ruts should be smoothed out and additional stone installed along this portion to prevent further erosion and sedimentation. Haybales were installed here but did not seem to have much effect. 12/30/05.
	-Archers Lane: -Grading continues along the access road to the site. The access road was fairly muddy at the time of inspection. 12/30/05. - Norwalk Junction: Sediment tracking was not noted from the gravel pad of the access drive. 12/30/05.	- None at this time.12/30/05. -Continue to monitor sediment tracking issues and sweep streets if necessary. 12/30/05.
Foundation construction	- The Hoyts Hill station yard has been backfilled and brought to grade. Final grades are not complete along the wetland edge due to future work here. 11/17-12/30/05.	-None at this time. 12/30/05.
	- Additional work may be necessary on the outlet/dissipater pads as	-The pads may need to be extended based on the noted erosion issues. See erosion

Areas of Inspection	Observation	Recommended Action
	erosive gullies continue. 12/01-12/30/05At Archers Lane, construction of the retaining walls continues. 12/30/05.	control section. 12/01-12/30/05. -None at this time. 12/30/05
Foundation construction continued	- Earthwork and foundation work continues in the station yard and large soil and stone stockpiles were noted. 12/30/05.	-None at this time. The soil remains on site. 12/30/05
	-At Norwalk Junction, the perimeter chain link fence has been installed. 12/30/05.	- See erosion control section for more information. 12/30/05.
Erosion and Sediment Controls (includes inspection within 24 hours of a storm event)	-Hoyts Hill: The majority of the perimeter silt fence remains in good condition and water was seen running clear through the barrier, although a small amount of sedimentation was noted. 12/30/05. - The erosive gullies continue to worsen on both the northern and southern slopes resulting in sediment deposits along the silt fence. 10/27-12/30/05. -As stated previously, erosion and sedimentation were noted at the access drive and the haybales did not have much effect. 12/30/05.	- Continue to monitor the area and be proactive in maintenance of the erosion controls, especially in areas with wetland immediately adjacent. 12/30/05 Gullies should be repaired and a stronger method of stabilization, such as erosion control mats, should be considered. 10/27-12/30/05Investigate whether extension of the outlet stone pad would help the situation and restore the erosion caused here. 10/27-12/30/05 Ruts should be smoothed out and additional stone installed in the disturbed area of the access drive to prevent further
	- Archers Lane: Monitor stormwater run-off velocity off the engineered slope. This area is steep and water used to collect at the base at the silt fence. A small amount of snow/sediment was pushed over the perimeter silt fence along the access road. 12/30/05.	erosion and sedimentation. 12/30/05. - Continue to monitor this area, especially after significant rain events. This is where sediment had previously collected. 12/30/05.

Areas of Inspection	Observation	Recommended Action
Erosion and Sediment Controls continued	- Norwalk Junction: The snow that was previously plowed up and over the perimeter silt fence adjacent to the Norwalk River appears to have melted leaving soil piles. 12/30/05 The majority of the perimeter silt fence remains down or un-toed. 12/22-12/30/05.	-Coordinate with 115kv to assure that snow piles will not be placed along the Norwalk River as a result of future plowing. The entire erosion control barrier is still in need of repair. 12/22-12/30/05
	-The cleared/disturbed soils noted outside the silt fence adjacent to the river, are now mostly flooded with turbid water.12/30/05	- This turbidity is likely partially a result of runoff from the site and partially from 345kV project related dewatering. 12/30/05.
	- Erosive gullies were noted along the drainage swale due to site run-off, resulting in some sedimentation to the swale. The surrounding soil is disturbed. 12/30/05.	- The erosion control matting on the swale may need to be extended up and over the top of slope to prevent further erosion until the growing season. 12/30/05 - Erosion controls should be
	-Dewatering associated with 345kv vault excavation also resulted in turbid water in the swale which then discharged into the wetland. This is in additional to any turbidity caused by the site run-off. It is difficult to completely separate out one from the other. 12/30/05.	installed at the inlet and/or outlet culverts to help prevent further sediment from entering the wetland as a result of the surrounding disturbed soil and future dewatering needs on site. Watch for any additional soil migration towards the drainage swale. 12/14-12/30/05.
Inland Wetland and Watercourse encroachment and mitigation	- Hoyts Hill: As part of the transition station, a small area of wetland was cleared and altered. The outer silt fence is still up as a work limit. Sediment is accumulating along the fence from the erosion but water continues to run clear through the fence in this area.12/8/05-12/30/05.	-Continue to monitor. In general, keep all equipment and materials out of wetlands not to be disturbed and keep controls in good repair. Work is still proposed through here to connect with the underground facilities. 11/10-12/30/05.
	-Archers Lane: No immediate wetland area concerns were noted. Watch run-off velocity down the completed slopes and walls. 12/30/05.	-None at this time. 12/30/05.

Areas of Inspection	Observation	Recommended Action
	- Norwalk Junction: The majority of the perimeter erosion controls along the Norwalk River are in need of repair, partly due to snow plowing issues and partly due to wear. 12/22-12/30/05.	- Perimeter controls still need to be maintained through coordination by the 115kv or transition contractors. 12/22-12/30/05.
	- Flooding may be an issue during extended periods of rain. 11/23/05- 12/30/05.	permitted work. Ground water is extremely high. 12/30/05.
	- The outlet of the drainage swale is at the headwall of the wetland area. Turbidity issues were noted here but have not had a significant impact on the river. 12/30/05.	-See Erosion Control Section for more details 12/30/05.
State species of concern, threatened and endangered species	- No species of concern are located in these areas of construction.	- N/A
Vegetative clearing limits (including trees to save or danger trees noted)	-Hoyts Hill: The slopes and areas surrounding the site had begun to experience noticeable increase in growth before the cold weather but erosion issues continue and will need attention. 11/17-12/30/05.	- It will be difficult to obtain sufficient growth due to the late time of year. An alternative method of stabilization, such as Erosion Control Mats should be considered. 11/02-12/30/05.
	- Archers Lane: No new clearing was noted during this inspection. 12/30/05.	-None at this time. 12/30/05.
	- Norwalk Junction: Brush piles had been removed along the wetland/silt fence line but it appears additional vegetation had been cleared in the area, leaving disturbed soil outside the silt fence. 11/23-12/30/05.	- This area was not restored or enclosed in silt fence but is now partially flooded. 12/30/05.
Dewatering	-Dewatering was not necessary at Hoyts Hill but erosion resulting from the outlet pipes and slope run-off continues. 12/30/05.	-See erosion control section. 12/30/05.
	- No dewatering has been	

Areas of Inspection	Observation	Recommended Action
	observed at Archers Lane. 12/30/05.	- None at this time. 12/30/05
Blasting	- Dewatering associated with 345kv vault excavation also resulted in turbid water in the swale which then discharged into the wetland. The sediment was said to be partially due to a broken filter bag. An intact filter was being used at the time of inspection, but the remaining sediment had not been cleaned resulting in a continued discharge of turbid water into the wetland area. - All blasting is complete at this time. 12/30/05.	- Sediment should be cleaned and proper erosion controls installed before dewatering continues. Groundwater here is extremely high and will require dewatering for multiple portions of the project. See erosion control section for recommended actions. 12/30/05.
Spills and Material Storage	-No spills or leaks were noted during this inspection 12/30/05.	- Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) if they will be used or stored on site - Report spills immediately, even if they are being controlled Take care not to get carried away and to be vigilant when refueling. Avoid refueling in the areas near the wetlands. Se proper storage for all materials.
Additional Observations		

Next likely scheduled	
inspection:	Wednesday, January 4, 2006

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

Inspector's Signature:	Diana Walden for Don Ukers



Hoyts Hill Transition Station: Both photos show views of the gullies to the north and south of the station pad. Sedimentation continues along the silt fence as a result. 12/30/05



Photo on the left shows the ruts along the edge of the access drive and the sedimentation caused by runoff from the road, over this disturbed area. Photo on the right shows an overall view of the transition station pad. 12/30/05.



Archers Lane: Photo on the left shows the muddy conditions along the access drive, looking toward Diamond Hill Road. Photo on the right shows a view along the boulder slope of the access road. 12/30/05.



Archers Lane: Photo shows the progress being made on the retaining walls and foundations. 12/30/05.



Norwalk Junction: Photo on the left shows the perimeter silt fence along the Norwalk River. The majority of this silt fence is need of repair. Photo on the right shows the newly installed perimeter fence along the station pad and a crane preparing for vault placement for the 345kV section of the project. 12/30/05



Photo on the left shows turbid water within the swale partially as a result of 345kV project related dewatering. Multiple erosive gullies were noted down the edge of the swale as a result of site run-off. Photo on the right shows the area of the swale outlet where turbid water entered the wetland associated with the Norwalk River. This is also likely to be partially a result of 345kV work and partially site run-off. 12/30/05